



CONTENTS OF VOLUME 9

Number 1

Metabolite Production Rates from Atlantic Salmon (<i>Salmo salar</i> L.) and Arctic Char (<i>Salvelinus alpinus</i> L.) Reared in Single Pass Land-Based Brackish Water and Sea-Water Systems	1
SVEINUNG FIVELSTAD, JAN M. THOMASSEN, MICHAEL J. SMITH, HELGI KJARTANSSON & ANNE-BRITT SANDØ (Norway)	
Vaccines in Aquaculture: The Search for an Efficient Delivery System	23
EDWARD J. DUNN, ALAN POLK, DAVID J. SCARRETT, GILES OLIVIER, SANTOSH LALL & MATTHEUS F. A. GOOSEEN (Canada)	
Gas Transfer within a Multi-Stage Packed Column Oxygen Absorber: Model Development and Application	33
BARNABY J. WATTEN & CLAUDE E. BOYD (USA)	
Managing Shrimp Pond Water to Reduce Discharge Problems	61
JAW-KAI WANG (USA)	

Number 2

Calibration and Validation of TAP, an Aquaculture Pond Water Quality Model	75
RAUL H. PIEDRAHITA (USA)	
Modeling the Effects of Serial Off-Gas Reuse on the Performance of a Hooded Surface Oxygen Absorption System	97
BARNABY J. WATTEN, JAMES W. MEADE & CLAUDE E. BOYD (USA)	
Lack of Density Effect on Growth and Smolt Quality in Zero-Age Coho Salmon	121
J. BLACKBURN & W. C. CLARKE (Canada)	
A PC-Aided Video Based System for Behaviour Observation of Fish Larvae and Small Aquatic Invertebrates	131
INGVAR HUSE & ANNE BERIT SKIFTESVIK (Norway)	

Number 3

Organic Pollution Resulting from Excess Feed and Metabolite Build-up: Effect on <i>Penaeus monodon</i> Postlarvae	143
OSENI M. MILLAMENA (Philippines)	
Techniques for Assessment of Stratification and Effects of Mechanical Mixing in Tropical Fish Ponds	151
JAMES P. SZYPER & C. KWEI LIN (USA)	
The Development of Closed Rearing Systems in China	167
ZHU YONG-LIANG (People's Republic of China)	
Control of High pH in Aquacultural Ponds	175
J. W. POTE, T. P. CATHCART & P. N. DELIMAN (USA)	

- Design and Performance of Water Recirculation Systems for Eel Culture 187
 L. T. N. HEINSBROEK & A. KAMSTRA (The Netherlands)

Short Communication

- Screening as a Method for Removal of Parasites from Inlet Water to Fish Farms 209
 HELGE LILTED & BJØRN R. HANSEN (Norway)

Number 4

- Aerobic and Anaerobic Biofiltration in an Aquaculture Unit-Nitrite
 Accumulation as a Result of Nitrification and Denitrification 217
 JAAP VAN RIJN & GUILLERMO RIVERA (Israel)
- The Effect of Shading in Pen Rearing of Atlantic Salmon (*Salmo salar*) 235
 INGVAR HUSE, ÅSMUND BJORDAL, ANDERS FERNÖ &
 DAG FUREVIK (Norway)
- Comparative Hydraulics and Rearing Trial Performance of a Production Scale
 Cross-Flow Rearing Unit 245
 BARNABY J. WATTEN & ROBERT P. JOHNSON (USA)
- A Culture System for Fairy Shrimps (Crustacea, Anostraca) 267
 LUC BRENDONCK, GUIDO UYTTERSPOOT &
 GUIDO PERSOONE (Belgium)
- Short Communication**
- Design and Performance of the BIOFISH Water Recirculation System 285
 BJØRNAR EIKEBROKK (Norway)

Number 5

- Techniques on Algae Harvesting and Preservation for Use in Culture and as
 Larval Food 295
 OSENI M. MILLAMENA, EVA J. AUJERO &
 ILDA G. BORLONGAN (Philippines)
- Design of Packed Columns for Commercial Oxygen Addition and Dissolved
 Nitrogen Removal based on Effluent Criteria 305
 BARNABY J. WATTEN (USA)
- Effect of Selected Variables on the Preparation of Gelatin-Acacia
 Microcapsules for Aquaculture 329
 M. PLANAS, M. J. FERNANDEZ-REIRIZ, M. J. FERREIRO &
 U. LABARTA (Spain)
- Intensive Early Rearing of Larvae of Cyprinids and Other Species in
 Suspended Tarpaulin Silos 343
 R. KNÖSCHE & G.-U. MEYLAHN (Germany)
- Short Communication**
- Induction of Spawning in Turbot (*Scophthalmus maximus* L.) by a Sudden
 Change in the Photoperiod 357
 R. FORÉS, J. IGLESIAS, M. OLMEDO, F. J. SÁNCHEZ &
 J. B. PELETEIRO (Spain)
- Technical Note**
- Effect of Different Diets and Water Quality on the Growth of the Larvae of
Trichogaster trichopterus (B & S 1801) 367
 GAD DEGANI (Israel)

Number 6

Free Water Productivity Measurements in Leaky Mariculture Ponds RICHARD S. J. WEISBURD & EDWARD A. LAWS (USA)	377
A Novel Fish Counter for Fish Farms N. J. C. STRACHAN & F. J. NICHOLSON (UK)	405
The Effects of Feed Water Flow Rate on the Growth of Aquacultured <i>Crassostrea virginica</i> in Hawaii CHEE-YIN LAM & JAW-KAI WANG (USA)	411
Nursery Engineering for Nori Aquaculture MICHAEL R. WILLIAMSON & DAVID M. ROBICHAUX (USA)	429
Short Communication	
A Semi-intensive Method for Spat Production of the European Flat Oyster (<i>Ostrea edulis</i> L.) KJELL E. NAAS (Norway)	447

